STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 163865

TO: Ralph J Gitomer
Location: 3d65 / 3c18
Art Unit: 1655
Wednesday, September 14, 2005

Case Serial Number: 10/650482

From: Noble Jarrell
Location: Biotech-Chem Library
Rem 1B71
Phone: 272-2556

Noble.jarrell@uspto.gov

Search Notes

FIGURE 2A and 2B: Full length human GADD34-Like (GADD34L) cDNA sequence (SEQ ID NO: 1). The open reading frame encoding the full length human GADD34L protein is encompassed by nucleotides 407 through 2548, inclusive. The start codon for the GADD34L protein is bold and underlined (**ATG, FIGURE 2A**), while the stop codon is underlined (TGA, **FIGURE 2B**). This sequence is identical to that of Genbank Accession Numbers NM_032833 and AK027650.

FIGURE 3: Full length human GADD34-Like (GADD34L) amino acid sequence (SEQ ID NO: 2). This protein sequence is encoded by nucleotides 407 through 2545, inclusive, of the full length human GADD34L cDNA sequence (see Figure 2A and 2B). This sequence is identical to that of Genbank Accession Number NM_032833.

FIGURE 4A, 4B, 4C, and 4D: Full length mouse GADD34-Like (GADD34L) cDNA sequence (SEQ ID NO: 3). The open reading frame encoding the full length mouse GADD34L protein is encompassed by nucleotides 462 through 2558, inclusive. The start codon for the GADD34L protein is bold and underlined (**ATG**, **FIGURE 4A**), while the stop codon is underlined (TGA, **FIGURE 4B**).

FIGURE 5: Full length mouse GADD34-Like (GADD34L) amino acid sequence (SEQ ID NO: 4). This protein sequence is encoded by nucleotides 462 through 2555, inclusive, of the full length mouse GADD34L cDNA sequence (see Figure 4A, 4B, 4C and 4D).

FIGURE 6: Inhibition of endogenous GADD34L protects cells against oxidative toxicity. The bar graphs show percent survival of HT22 cells following exposure to toxic amounts of glutamate. HT22 cells were treated with 70μM 22P19 for 24 or 48h (top panel), or left untransfected (NTx), mock transfected, transfected with GADD34L siRNA, or transfected with control or CD2 siRNA (bottom panel), and then exposed to the indicated concentrations of glutamate for 18 hours. 100% survival is defined as the level of MTT ((3-[4,5-dimethylthiazol-2-yl]-2,5-diphenyl tetrazolium bromide, Sigma) cleavage in cells that had not been exposed to glutamate in each treatment group. Shown are the means ± SEM of a representative experiment performed in duplicate and repeated

four times. There was dramatically improved cell survival following pre-treatment with 22P19, or RNAi-based inhibition of GADD34L. 22P19 is a chemical inhibitor of GADD34L isolated in a high-throughput screen based on its ability to protect cells from tunicamycin toxicity.

FIGURE 7: The structure of 22P19. The chemical compound called 22P19 was isolated by screening the Chembridge™ library (Chembridge San Diego, CA) for compounds that protect PC-12 cells from death induced by prolonged exposure to tunicamycin.

DETAILED DESCRIPTION OF THE INVENTION

Definitions:

The terms used in this specification generally have their ordinary meanings in the art, within the context of the invention, and in the specific context where each term is used. Certain terms are discussed below, or elsewhere in the specification, to provide additional guidance to the practitioner in describing the devices and methods of the invention and how to make and use them. For convenience, certain terms are highlighted, for example using italics and/or quotation marks. The use of highlighting has no influence on the scope and meaning of a term; the scope and meaning of a term is the same, in the same context, whether or not it is highlighted. It will be appreciated that the same thing can be said in more than one way. Consequently, alternative language and synonyms may be used for any one or more of the terms discussed herein, nor is any special significance to be placed upon whether or not a term is elaborated or discussed herein. Synonyms for certain terms are provided. A recital of one or more synonyms does not exclude the use of other synonyms. The use of examples anywhere in this specification, including examples of any terms discussed herein, is illustrative only, and in no way limits the scope and meaning of the invention or of any exemplified term. Likewise, the invention is not limited to the preferred embodiments.

Primary reactive oxygen species (ROS) include, but are not limited to, superoxide radical, hydrogen peroxide, hydroxyl radical, and ortho-quinone derivatives of

SEQUENCE LISTING

<110> Ron, David
Jousse, Celine

<120> METHODS OF SCREENING TEST COMPOUNDS USING GADD34L, AN eIF2alpha-SPECIFIC PHOSPHATASE SUBUNIT

<130> 5986/1L712-US1

<150> US 60/408,679
<151> 2002-09-06

<160> 10

<170> PatentIn version 3.1

<210> 1
<211> 2942
<212> DNA
<213> Homo sapiens

<400> 1
attttgggct tcgcttccac cgcaccagcc ggcctaccca gtccttccgg tatcgcgttg 60

ctcaggggct tttcaaccct ctgtcagtcg gaaaaccatc gccgaggccg tgggggggact 120

cctatccatg gtgttgaagc gtcgagccga ctagggaacc tccttccccg ccaggatgga 180

agtcgcatca gtcgccgcct attgcgcggg ctgttcttcc ctgtgttctg ccgcccgctg 240

ccgcattcgc tgccctctgt ggcttttctg ctggctcgaa gatcggcctg gagcagcgac 300

gccaccgctg ggcaaggccg agactctgta ggcttcctcc gaatcccgtc gacctccagc 360

cgctgagcgc cgcggcccta cctgagagac tgtcaagaaa aaggagatgg agccggggac 420

aggcggatcg cggaaacggc ttggccctcg ggcgggcttc cggttctggc caccctttt 480

ccctcggcga tcgcaagcag gctcttctaa gttcccgacg cctcttggcc cggaaaactc 540

cgggaacccc acactgcttt cctctgccca gcccgagact cgggtcagtt actggacgaa 600

actgctctcc cagctccttg cgccgctccc cggattgctt cagaaggtgc taatttggag 660

ccaacttttc ggtggaatgt ttccgaccag atggctagat tttgctggag tctacagcgc 720

cctgagagcc ctgaagggac gggagaaacc agccgccccc acagcgcaga aatctttgag 780

ttcgctgcag ctcgactcct cagacccctc ggtcaccagt ccccttgatt ggctagagga 840

ggggatccac tggcaatact cgcccccaga cctaaaattg gagcttaagg ccaagggaag 900

tgctttggac cctgcagcac aggcttttct cttagagcag cagctgtggg gagtggagct 960

gttgcccagt agccttcaat cccgtctgta ctctaaccgg gaacttggct cttcgccctc 1020

tgggcctcta aacattcaac gcatagacaa tttcagtgtg gtatcctatt tgctgaaccc 1080

ttcctacctg gactgctttc ctaggctaga agtcagctat cagaacagtg atggaaatag 1140

cgaggtagtc ggcttccaga cactaacccc agagagcagc tgcctgagag aggaccattg 1200

tcatccccag ccgctgagtg cagaactcat tccggcctcg tggcagggat gtccacctct 1260

ttctacggaa ggcctaccag aaattcacca tcttcgcatg aaacggctgg aattccttca 1320

acaggctaac aaggggcaag atttacccac ccctgaccag gataatggct accacagcct 1380

ggaggaggaa cacagccttc tccggatgga tccaaaacac tgcagagata acccaacaca 1440

gtttgttcct gctgctggag acattcctgg aaacacccag gaatccactg aagaaaaaat 1500

agaattatta actacagagg ttccacttgc tttggaagaa gagagccctt ctgagggctg 1560

tccatctagt gagataccta tggaaaagga gcctggagag ggccgaataa gtgtagttga 1620

ttactcatac ctagaaggtg accttcccat ttctgccaga ccagcttgta gtaacaaact 1680

gatagattat attttgggag gtgcatccag tgacctggaa acaagttctg atccagaagg 1740

tgaggattgg gatgaggaag ctgaggatga tggttttgat agtgatagct cactgtcaga 1800

ctcagacctt gaacaagacc ctgaagggct tcacctttgg aactctttct gcagtgtaga 1860

tccttataat ccccagaact ttacagcaac aattcagact gctgccagaa ttgttcctga 1920

agagccttct gattcagaga aggatttgtc tggcaagtct gatctagaga attcctccca 1980

gtctggaagc cttcctgaga cccctgagca tagttctggg gaggaagatg actgggaatc 2040

tagtgcagat gaagcagaga gtctcaaact gtggaactca ttctgtaatt ctgatgaccc 2100

ctacaaccct ttaaatttta aggctccttt tcaaacatca ggggaaaatg agaaaggctg 2160

tcgtgactca aagaccccat ctgagtccat tgtggccatt tctgagtgtc acaccttact 2220

ttcttgtaag gtgcagctgt tggggagcca agaaagtgaa tgtccagact cggtacagcg 2280

tgacgttctt tctggaggaa gacacacaca tgtcaaaaga aaaaaggtaa ccttccttga 2340

agaagttact gagtattata taagtggtga tgaggatcgc aaaggaccat gggaagaatt 2400

tgcaagggat ggatgcaggt tccagaaacg aattcaagaa acagaagatg ctattggata 2460

ttgcttgaca tttgaacaca gagaaagaat gtttaataga ctccagggaa catgcttcaa 2520

aggacttaat gttctcaagc aatgttgagt tggcagcctg tagtcctagc tagcatacac 2580

tacctcttac ctgagaggtg tcttttaaaa acaaatcttg gcagctgtcc tttgacattt 2640

tttttttag aggaaatgta acttggatct agtttaattt tttttttgc aacatatccc 2700

actcagaaac attcaggttt gaagccagcc ctgataatga aggatgaact agtgtgattt 2760

ctaatcctcc ctttttgat ttagttggat gtgcttttaa atgtcctttg cctgcatgag 2820

gtggaaaggg gacctttttg agttgtcatt ttgcactttc aaaacttatt ttcttggaaa 2880

acaatattta tagggcttaa agcccatttt catttctaat ctaaattatg tgtgcctatc 2940

tg 2942

<210> 2
<211> 713
<212> PRT
<213> Homo sapiens

<400> 2

Met Glu Pro Gly Thr Gly Gly Ser Arg Lys Arg Leu Gly Pro Arg Ala
1 5 10 15

Gly Phe Arg Phe Trp Pro Pro Phe Phe Pro Arg Arg Ser Gln Ala Gly
20 25 30

Ser Ser Lys Phe Pro Thr Pro Leu Gly Pro Glu Asn Ser Gly Asn Pro
35 40 45

Thr Leu Leu Ser Ser Ala Gln Pro Glu Thr Arg Val Ser Tyr Trp Thr
50 55 60

Lys Leu Leu Ser Gln Leu Leu Ala Pro Leu Pro Gly Leu Leu Gln Lys
65 70 75 80

Val Leu Ile Trp Ser Gln Leu Phe Gly Gly Met Phe Pro Thr Arg Trp
85 90 95

Leu Asp Phe Ala Gly Val Tyr Ser Ala Leu Arg Ala Leu Lys Gly Arg
100 105 110

Glu Lys Pro Ala Ala Pro Thr Ala Gln Lys Ser Leu Ser Ser Leu Gln
115 120 125

Leu Asp Ser Ser Asp Pro Ser Val Thr Ser Pro Leu Asp Trp Leu Glu
130 135 140

Glu Gly Ile His Trp Gln Tyr Ser Pro Pro Asp Leu Lys Leu Glu Leu
145 150 155 160

```
Lys Ala Lys Gly Ser Ala Leu Asp Pro Ala Ala Gln Ala Phe Leu Leu
                165                 170                 175

Glu Gln Gln Leu Trp Gly Val Glu Leu Leu Pro Ser Ser Leu Gln Ser
            180                 185                 190

Arg Leu Tyr Ser Asn Arg Glu Leu Gly Ser Ser Pro Ser Gly Pro Leu
        195                 200                 205

Asn Ile Gln Arg Ile Asp Asn Phe Ser Val Val Ser Tyr Leu Leu Asn
    210                 215                 220

Pro Ser Tyr Leu Asp Cys Phe Pro Arg Leu Glu Val Ser Tyr Gln Asn
225                 230                 235                 240

Ser Asp Gly Asn Ser Glu Val Val Gly Phe Gln Thr Leu Thr Pro Glu
                245                 250                 255

Ser Ser Cys Leu Arg Glu Asp His Cys His Pro Gln Pro Leu Ser Ala
            260                 265                 270

Glu Leu Ile Pro Ala Ser Trp Gln Gly Cys Pro Pro Leu Ser Thr Glu
        275                 280                 285

Gly Leu Pro Glu Ile His His Leu Arg Met Lys Arg Leu Glu Phe Leu
    290                 295                 300

Gln Gln Ala Asn Lys Gly Gln Asp Leu Pro Thr Pro Asp Gln Asp Asn
305                 310                 315                 320

Gly Tyr His Ser Leu Glu Glu Glu His Ser Leu Leu Arg Met Asp Pro
                325                 330                 335

Lys His Cys Arg Asp Asn Pro Thr Gln Phe Val Pro Ala Ala Gly Asp
            340                 345                 350

Ile Pro Gly Asn Thr Gln Glu Ser Thr Glu Glu Lys Ile Glu Leu Leu
        355                 360                 365

Thr Thr Glu Val Pro Leu Ala Leu Glu Glu Glu Ser Pro Ser Glu Gly
    370                 375                 380

Cys Pro Ser Ser Glu Ile Pro Met Glu Lys Glu Pro Gly Glu Gly Arg
```

385 390 395 400

Ile Ser Val Val Asp Tyr Ser Tyr Leu Glu Gly Asp Leu Pro Ile Ser
405 410 415

Ala Arg Pro Ala Cys Ser Asn Lys Leu Ile Asp Tyr Ile Leu Gly Gly
420 425 430

Ala Ser Ser Asp Leu Glu Thr Ser Ser Asp Pro Glu Gly Glu Asp Trp
435 440 445

Asp Glu Glu Ala Glu Asp Asp Gly Phe Asp Ser Asp Ser Ser Leu Ser
450 455 460

Asp Ser Asp Leu Glu Gln Asp Pro Glu Gly Leu His Leu Trp Asn Ser
465 470 475 480

Phe Cys Ser Val Asp Pro Tyr Asn Pro Gln Asn Phe Thr Ala Thr Ile
485 490 495

Gln Thr Ala Ala Arg Ile Val Pro Glu Glu Pro Ser Asp Ser Glu Lys
500 505 510

Asp Leu Ser Gly Lys Ser Asp Leu Glu Asn Ser Ser Gln Ser Gly Ser
515 520 525

Leu Pro Glu Thr Pro Glu His Ser Ser Gly Glu Glu Asp Asp Trp Glu
530 535 540

Ser Ser Ala Asp Glu Ala Glu Ser Leu Lys Leu Trp Asn Ser Phe Cys
545 550 555 560

Asn Ser Asp Asp Pro Tyr Asn Pro Leu Asn Phe Lys Ala Pro Phe Gln
565 570 575

Thr Ser Gly Glu Asn Glu Lys Gly Cys Arg Asp Ser Lys Thr Pro Ser
580 585 590

Glu Ser Ile Val Ala Ile Ser Glu Cys His Thr Leu Leu Ser Cys Lys
595 600 605

Val Gln Leu Leu Gly Ser Gln Glu Ser Glu Cys Pro Asp Ser Val Gln
610 615 620

```
Arg Asp Val Leu Ser Gly Gly Arg His Thr His Val Lys Arg Lys Lys
625                 630                 635                 640

Val Thr Phe Leu Glu Glu Val Thr Glu Tyr Tyr Ile Ser Gly Asp Glu
                645                 650                 655

Asp Arg Lys Gly Pro Trp Glu Glu Phe Ala Arg Asp Gly Cys Arg Phe
            660                 665                 670

Gln Lys Arg Ile Gln Glu Thr Glu Asp Ala Ile Gly Tyr Cys Leu Thr
        675                 680                 685

Phe Glu His Arg Glu Arg Met Phe Asn Arg Leu Gln Gly Thr Cys Phe
    690                 695                 700

Lys Gly Leu Asn Val Leu Lys Gln Cys
705                 710
```

<210> 3
<211> 5468
<212> DNA
<213> Mus musculus

<400> 3

```
cggtcctccg tctcgccctg cagcttccgg gtgtgcggct gcggccattt tgagcttcgc     60

ttctttgcgc cctcgcctgc cacccagcca ccctttccgc cttggcgttt cgcgcctccg    120

tgcgggccac cggaaacgcc gccgtcgtct ccgtcgccgc cgcgcgaggg agggtcttct    180

ctatggtgga gcgatctcac acggcctagg acgtctcctt ccctagccgg gatggaccta    240

accgcggtcg ccaccgcttg cgcgggcctc tgggccgtcc ggtgcagcac tcgttgcgga    300

agccgccgct ctctgggcct cctctgccgg cgcgggaatc ggactgcagt acccactccg    360

tggctgggca aggcggagac tgtgtagacc tcggatccag cctgcgctga cgccgctgag    420

ctctgtcctc ctcctgtctg agaagccgcc aaggaaagga gatggagaca ggaacgcaca    480

gggcccggaa gcggcctggc cctcggctgg gctcctggtt ccggctgccc ttccttcggc    540

gatcgcacgc ctgctcttcg gagttcccgc cgccttcctc tcgacaaaat cccgggaact    600

ccgctctgcc cgagcgtcgg accaggtact ggaccaaatt gctttctcag ctccttgccc    660

tgctccctag cctattccag aagctgctgc tttggagcca gctttccggg ggcctgattc    720

ctaccagatg gctagatttt gccgcaagtt acagcgccct gagagcttcg agaggacggg    780
```

aggaatctga cgctcccacg gtgcagaagt ctctgagtta cactgcggct ggactcttcg 840

cgaagactcg cgtcgtcagt actcttgcat tggctagagg agggactcca gtggcagtgc 900

tcgtcctcag actggaagtt aaactcaagg cccaggaaag agctttagac tctgcagcgc 960

ccactttcct cctggagcag cagctgtggg gagtggagtt gctgcccagt agccttcaag 1020

ctggtctagt ctcccaccga gaacttgact cttcatcctc tgggcctctg agcgttcaga 1080

gcttaggtaa tttcaaggta gtttcctatc tcctgaaccc ttcctacctg gactaccttc 1140

cccagttagg gctgcgctgt cagagcagcg ctggaggtgg ccagtttgtg ggtttccgaa 1200

cactaacccc agagagctgc tatctttctg aagatggttg tcaccctcag ccgttgcggg 1260

cagagatgtc ggcaaccgcc tggagaaggt gtccgcctct ctctacagaa ggcctgccgg 1320

aaatccacca ccttcgtatg aaacggctag aattcctcca ggctaacaaa gggcaagagt 1380

tacccacccc tgaccaagat aatggctatc atagcctgga ggaggaacat aaccttctcc 1440

ggatggaccc acaacattgc acagataacc cagcacaggc ggtgtcccct gctgcagaca 1500

ggccggagcc cactgagaaa aaaccagaat tggtgattca agaagtttca cagagccccc 1560

agggaagcag tctgttttgt gaattacccg tggaaaaaga atgtgaagag gaccacacta 1620

atgcaactga cctctcagat agaggagaga gccttcctgt ttctaccaga ccagtttgta 1680

gcaacaaact gatagattat attttgggag gcgcccccag tgacttggaa gccagctctg 1740

attctgaaag tgaggattgg ggcgaggaac ctgaggacga tggctttgat agcgatggct 1800

ccctgtctga atcagacgtg gaacaggact cggaaggcct tcacctttgg aactctttcc 1860

acagtgtaga tccttacaaa ccccaaaact ttacagccac gattcagacg gctgccagaa 1920

ttgcccccag agacccatca gattcaggga catcctggtc tggcagctgt ggtgtaggga 1980

gctgtcagga gggacccctt ccggagaccc ccgaccatag ttccggggag gaagatgact 2040

gggaaccgag tgcagatgaa gcagagaatc ttaaattgtg gaactctttc tgtcattctg 2100

aggaccccta caacctttta aattttaagg ctccttttca accgtcaggg aagaattgga 2160

aaggccgtca ggactcaaag gcctcttctg aggtcacagt ggccttctct ggccatcata 2220

ccttactttc ttgtaaggcc cagctgttag agagccaaga agataattgt ccaggctgtg 2280

ggctgggtga ggctcttgct ggagaaagat acacccatat caagagaaaa aaggtaacct 2340

tcctggaaga agttactgag tattatataa gtggtgatga ggatcgcaaa ggaccatggg 2400

aagaatttgc aagggatgga tgcaggttcc agaaacgaat tcaagaaaca gaagttgcca 2460

ttggctactg cttggccttt gagcacagag aaaaaatgtt taatagactg aggatcgagt 2520

caaaggactt actgttgtac agcaatgtta agaagtgaac agcctgcaac ccgtgcccac 2580

tctgtctctt acttgagagt ttcccttaaa aacaaacact ggcagctgtc cttggacatg 2640

tttttaaaga aacaacttgt atctagagat gcagtttgat tatttttggg taatgtgtct 2700

cattagaaac accaactccg ataatgaaga atctcttatc tgtaatcctc tcttttccta 2760

tttagttgga tgtgggtttt gtctttttga gagggtctca ctgcataatt ctgtttggcc 2820

taggtctatg tatgtagacc aggttggcct tgaagttggt atttccttgc ctctgtttcc 2880

tgtgccacca tgcccagctg gaagtgtttt taaatatcct ctgcttacct ggggtgagag 2940

tttaattttg cactttcaaa acgtttcttc tggaggcagg ggctggtctg gtttacatac 3000

aggcttcagg ccagctaggg ctatgtggtg agacctagtc ttagaggaca aacagaacaa 3060

aacagtcagg ttactgtgga aactgaggca ggaggatagg aaggtccagg tatgcctgga 3120

actcagtgaa ctctgaactc aaggccagca tggggagttt agcaagacct ttttacactc 3180

agaatggaaa aggaagctgg ggatatagct cggtagcaga ggcccctgcc tacatgtgca 3240

aggtcctggg ttcagtcccc agtactgcaa atagaaagaa aaaacattgt cttggataac 3300

tataaggttt aagcctcata gtcagttcta actcaaatta tgcatgcatt gagttcttgt 3360

gtgctttttc tgttctaaaa ttaatgggct ttatgggttt tgtttttgta tgtttttatg 3420

tctgttatat tttgaggtag gggattgagg cagggtctca ctgtggcctt gagctcatgg 3480

cagttttcct gcttcaactg agtgttttgg tttgtttgtg tttgtgtttt tttactttca 3540

tagatttgac ttaatgaagg caaaaacctg ttatcaacct aaaagacatt gatgtgtcac 3600

ttcagtggtg gattttctcc ctctttttt ttttccccca gagctgagga ccaaacccag 3660

ggctttgcac ttgctaggca agcgctctac cactgagcta aatccccaaa ccacccccc 3720

ccctttttctt tttttaaaga catggtctta tatagtctag gctggcctta aactcattac 3780

ttagccaagg atggctttga aagatcctcc tgtcctcttg tttggcttgc acatggcatg 3840

tgccatacat ccagattttt ctctgtatct aggtcttttt aagatatttc caaggactgc 3900

ccacaaatcc acagtgcagt actttcttga ctgggaaagc ggggttggtg tgcttttcaa 3960

aggcacacac cattatgccc agctggtctg ccaaacttaa catatttggt ttctgtgcaa 4020

actgtccatt tggaaggttt ctgtgtgttg tagtttcagt tgaatgtggc tctctgtagc 4080

tttcaagaat gggtagaaat cataaagcac tcttaagtaa tcattgcatt gtagacattt 4140

tttttttta actaggggt atttgggaga catgtcagat attcactttt gttttatgtg 4200

tcttaaaacc agtgttactt acaccctgcc tcagcactgg cacttttcaa acctgtcttg 4260

gagacactgt aaacttggat ggtgcagttc tgggttttca tgtgtaaaat gtcaactaca 4320

aaggtcaata tccaggtttg ttgtgttcta ccttatgtag agagaagcaa agcagaaagg 4380

gcagatagag cagccagaaa gtgctagtgt ccccccccaaa gcgtgcttct agatagtgtg 4440

tggatcaggt gtgcttggtt tgttcagtta gcgtcacctg ttgtgcatgg ttgaggtaat 4500

gtgttaccag ttctttagtg gttacatgca caaaagagag gacctctgag tcgggtgtgg 4560

gatgagcttt ccagacctgg cagggtaaac tacctcagtt tataatctcc ctggttattt 4620

ccgtttgatg tgatctaagg tctgcctcag tggtgatgat gttcatccac acacaaggtt 4680

agtaagagtg cacgaccaga aacgttggtc ttatttttga gaacccccat ttctgtgtat 4740

tttatgcacc tgcctttagt gaactccaga gtgcattaaa gagtctggtt tagtgccgtg 4800

ggaatgggct agtttagaag ctatgtttgg aaagcaggca agttgacttt aggaagaaaa 4860

gctgtgacag tgtgtagaca tttcttttaa accggactgc agcttaacaa cacttgattt 4920

cagatgatta ggtttttgtt tctgagaccc agcacctgta tatttaaaaa ttgttccaga 4980

ttacaccttc actatcaaat gagtaaatga ctcatgcctg cagacatgtc ctgatggtgg 5040

caagaacaga aggatctttg actgaaggag aaaaactgtc attgtcatcc cagcccccag 5100

gaaagaacac ctccaaggca ggcaggcagg caggcaggca tggtggttct agttgaatac 5160

acattcaagt cttgcagtgg tgctttagat ctgtgtagca tgtgaggctc tgtacaggtg 5220

ggggccacac ttctgagggc tgaaatgtgg caacccttta tctaacttga aatcaaaacc 5280

gtcaaatttt atttttata atttaagaaa gagttgggga atgacatttt ttgagttggc 5340

cttttcagct cagtcatttt acgtgtaacg tggagatttg atagctcaga ttatatttgt 5400

atataattat taactaatct gtaaattgta ataaatatat ttgcaattat taaaaaaaaa 5460

aaaaaaaa 5468

<210> 4
<211> 698
<212> PRT
<213> Mus musculus

<400> 4

Met Glu Thr Gly Thr His Arg Ala Arg Lys Arg Pro Gly Pro Arg Leu
1 5 10 15

```
Gly Ser Trp Phe Arg Leu Pro Phe Leu Arg Arg Ser His Ala Cys Ser
            20                  25                  30

Ser Glu Phe Pro Pro Pro Ser Ser Arg Gln Asn Pro Gly Asn Ser Ala
        35                  40                  45

Leu Pro Glu Arg Arg Thr Arg Tyr Trp Thr Lys Leu Leu Ser Gln Leu
    50                  55                  60

Leu Ala Leu Leu Pro Ser Leu Phe Gln Lys Leu Leu Leu Trp Ser Gln
65                  70                  75                  80

Leu Ser Gly Gly Leu Ile Pro Thr Arg Trp Leu Asp Phe Ala Ala Ser
                85                  90                  95

Tyr Ser Ala Leu Arg Ala Ser Arg Gly Arg Glu Glu Ser Asp Ala Pro
            100                 105                 110

Thr Val Gln Lys Ser Leu Ser Tyr Thr Ala Ala Gly Leu Phe Ala Lys
        115                 120                 125

Thr Arg Val Val Ser Thr Leu Ala Leu Ala Arg Gly Gly Thr Pro Val
    130                 135                 140

Ala Val Leu Val Leu Arg Leu Glu Val Lys Leu Lys Ala Gln Glu Arg
145                 150                 155                 160

Ala Leu Asp Ser Ala Ala Pro Thr Phe Leu Leu Glu Gln Gln Leu Trp
                165                 170                 175

Gly Val Glu Leu Leu Pro Ser Ser Leu Gln Ala Gly Leu Val Ser His
            180                 185                 190

Arg Glu Leu Asp Ser Ser Ser Ser Gly Pro Leu Ser Val Gln Ser Leu
        195                 200                 205

Gly Asn Phe Lys Val Val Ser Tyr Leu Leu Asn Pro Ser Tyr Leu Asp
    210                 215                 220

Tyr Leu Pro Gln Leu Gly Leu Arg Cys Gln Ser Ser Ala Gly Gly Gly
225                 230                 235                 240

Gln Phe Val Gly Phe Arg Thr Leu Thr Pro Glu Ser Cys Tyr Leu Ser
```

245 250 255

Glu Asp Gly Cys His Pro Gln Pro Leu Arg Ala Glu Met Ser Ala Thr
260 265 270

Ala Trp Arg Arg Cys Pro Pro Leu Ser Thr Glu Gly Leu Pro Glu Ile
275 280 285

His His Arg Arg Met Arg Trp Leu Val Phe Leu Gln Pro Asn Gln Gly
290 295 300

Gln Asp Leu Pro Thr Leu Asp Gln Asp Asn Gly Tyr His Ser Leu Glu
305 310 315 320

Glu Glu His Asn Leu Leu Arg Met Asp Pro Gln His Cys Thr Asp Asn
325 330 335

Pro Ala Gln Ala Val Ser Pro Ala Ala Asp Arg Pro Glu Pro Thr Glu
340 345 350

Lys Lys Pro Glu Leu Val Ile Gln Glu Val Ser Gln Ser Pro Gln Gly
355 360 365

Ser Ser Leu Phe Cys Glu Leu Pro Val Glu Lys Glu Cys Glu Glu Asp
370 375 380

His Thr Asn Ala Thr Asp Leu Ser Asp Arg Gly Glu Ser Leu Pro Val
385 390 395 400

Ser Thr Arg Pro Val Cys Ser Asn Lys Leu Ile Asp Tyr Ile Leu Gly
405 410 415

Gly Ala Pro Ser Asp Leu Glu Ala Ser Ser Asp Ser Glu Ser Glu Asp
420 425 430

Trp Gly Glu Glu Pro Glu Asp Asp Gly Phe Asp Ser Asp Gly Ser Leu
435 440 445

Ser Glu Ser Asp Val Glu Gln Asp Ser Glu Gly Leu His Leu Trp Asn
450 455 460

Ser Phe His Ser Val Asp Pro Tyr Lys Pro Gln Asn Phe Thr Ala Thr
465 470 475 480

Ile Gln Thr Ala Ala Arg Ile Ala Pro Arg Asp Pro Ser Asp Ser Gly
485 490 495

Thr Ser Trp Ser Gly Ser Cys Gly Val Gly Ser Cys Gln Glu Gly Pro
500 505 510

Leu Pro Glu Thr Pro Asp His Ser Ser Gly Glu Glu Asp Asp Trp Glu
515 520 525

Pro Ser Ala Asp Glu Ala Glu Asn Leu Lys Leu Trp Asn Ser Phe Cys
530 535 540

His Ser Glu Asp Pro Tyr Asn Leu Leu Asn Phe Lys Ala Pro Phe Gln
545 550 555 560

Pro Ser Gly Lys Asn Trp Lys Gly Arg Gln Asp Ser Lys Ala Ser Ser
565 570 575

Glu Val Thr Val Ala Phe Ser Gly His His Thr Leu Leu Ser Cys Lys
580 585 590

Ala Gln Leu Leu Glu Ser Gln Glu Asp Asn Cys Pro Gly Cys Gly Leu
595 600 605

Gly Glu Ala Leu Ala Gly Glu Arg Tyr Thr His Ile Lys Arg Lys Lys
610 615 620

Val Thr Phe Leu Glu Glu Val Thr Glu Tyr Tyr Ile Ser Gly Asp Glu
625 630 635 640

Asp Arg Lys Gly Pro Trp Glu Glu Phe Ala Arg Asp Gly Cys Arg Phe
645 650 655

Gln Lys Arg Ile Gln Glu Thr Glu Val Ala Ile Gly Tyr Cys Leu Ala
660 665 670

Phe Glu His Arg Glu Lys Met Phe Asn Arg Leu Arg Ile Glu Ser Lys
675 680 685

Asp Leu Leu Leu Tyr Ser Asn Val Lys Lys
690 695

```
=> d his

     (FILE 'HOME' ENTERED AT 15:36:20 ON 13 SEP 2005)

     FILE 'HCAPLUS' ENTERED AT 15:36:28 ON 13 SEP 2005
L1            1 US2004142345/PN OR (US2002-408679# OR US2003-650482#)/AP,PRN

     FILE 'REGISTRY' ENTERED AT 15:37:28 ON 13 SEP 2005

     FILE 'HCAPLUS' ENTERED AT 15:37:28 ON 13 SEP 2005
L2              TRA L1 1- RN :       55 TERMS

     FILE 'REGISTRY' ENTERED AT 15:37:28 ON 13 SEP 2005
L3           55 SEA L2

     FILE 'WPIX' ENTERED AT 15:37:34 ON 13 SEP 2005
L4            1 L1

=> b hcap;d all l1
FILE 'HCAPLUS' ENTERED AT 15:38:01 ON 13 SEP 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
the American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 13 Sep 2005  VOL 143 ISS 12
FILE LAST UPDATED: 12 Sep 2005  (20050912/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


L1   ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2005 ACS on STN
AN   2004:589132  HCAPLUS
DN   141:134040
ED   Entered STN:  23 Jul 2004
TI   Methods of screening test compounds using GADD34L, an eIF2alpha-specific
     phosphatase subunit
IN   Ron, David; Jousse, Celine
PA   USA
SO   U.S. Pat. Appl. Publ., 30 pp.
     CODEN: USXXCO
DT   Patent
LA   English
IC   ICM  C12Q001-68
     ICS  G01N033-53; G01N033-567
INCL 435006000; 435007200
CC   1-1 (Pharmacology)
     Section cross-reference(s): 15
FAN.CNT 1
     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     --------------       ----   --------    --------------------    --------
PI   US 2004142345         A1    20040722    US 2003-650482          20030828 <--
```

PRAI US 2002-408679P P 20020906 <--
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004142345	ICM	C12Q001-68
	ICS	G01N033-53; G01N033-567
	INCL	435006000; 435007200
US 2004142345	NCL	435/006.000 <--

AB The invention is directed to methods and reagents for identifying test substances useful for the prevention or treatment of diseases involving an oxidative stress. The methods involve screening assays, including high throughput screening techniques, in which the test substances are tested for their ability to promote resistance to oxidative stress by inhibiting the activity of GADD34L, and thereby inhibiting the dephosphorylation of eIF2α, while not causing stress.

ST GADD34L eIF2alpha kinase drug screening oxidative stress; high throughput screening eIF2alpha dephosphorylation inhibitor GADD34L phosphatase

IT Gene, animal
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(CAT; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(CHOP; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Proteins
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)
(GADD34, -Like (GADD34L); methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT mRNA
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(GADD34L; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Integrated Stress Response target; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Ischemia
(cardiac; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Nervous system, disease
(degeneration; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Oxidative stress, biological
(diseases involving; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT High throughput screening
(drug; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Drug screening
(high throughput; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Nucleic acid hybridization
(in situ; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Kidney, disease
(injury; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Heart, disease
Kidney, disease
Nerve, disease
(ischemia; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Gene, animal

RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(luc; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Autoimmune disease
DNA sequences
Dephosphorylation, biological
Drug screening
Human
Immunoassay
Northern blot hybridization
Protein sequences
(methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Ischemia
(neuronal; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Phosphorylation, biological
(protein; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Toxins
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(renal damage induced by; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Injury
Ischemia
(renal; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(stress-induced, 1, c; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT Antibodies and Immunoglobulins
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(to phosphorylated eIF2α; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT 9013-05-2D, Phosphatase, eIF2alpha-specific subunit (GADD34L)
82249-72-7, EIF2α kinase
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)
(methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT 139814-82-7, GenBank L00039 140289-54-9, GenBank M12481 150948-02-0, GenBank L15447 162197-23-1, GenBank D31863 178350-54-4, GenBank W90900 183046-65-3, GenBank AA111463 183265-10-3, GenBank D87990 187578-48-9, GenBank AA259342 189203-30-3, GenBank U83148 189869-11-2, GenBank D86527 197614-27-0, GenBank AA612483 200785-26-8, GenBank AA684508 201592-41-8, GenBank U63387 205560-99-2, GenBank AA866971 206018-51-1, GenBank AA881202 212429-53-3, GenBank AB014494 219900-69-3, GenBank AF063095 239345-32-5, GenBank AI839392 239717-83-0, GenBank AI845538 239720-42-4, GenBank AI845798 239745-83-6, GenBank AI848343 239773-54-7, GenBank AI851163 245142-65-8, GenBank AW120711 245145-64-6, GenBank AW120976 245154-27-2, GenBank AW121840 245166-12-5, GenBank AW123026 245181-02-6, GenBank AW124530 245192-02-3, GenBank AW125634 384476-04-4, GenBank M94087 389183-14-6, GenBank J04103 389375-15-9, GenBank AA049696 389392-18-1, GenBank AA096870 389434-31-5, GenBank AA213167 390638-13-8, GenBank AK027650 391557-92-9, GenBank U19118 391772-30-8, GenBank U40930 391791-12-1, GenBank U28423 391793-41-2, GenBank W84014 391807-41-3, GenBank AA0050417 391831-23-5, GenBank AA208877
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

IT 56-86-0, L-Glutamic acid, biological studies 11089-65-9, Tunicamycin 15502-74-6, Arsenite

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)
IT 725915-01-5 725915-03-7 725915-04-8 725915-05-9 725915-06-0
726439-38-9 726439-39-0
RL: PRP (Properties)
(unclaimed nucleotide sequence; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)
IT 725915-02-6 725915-08-2
RL: PRP (Properties)
(unclaimed protein sequence; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)
IT 725915-07-1
RL: PRP (Properties)
(unclaimed sequence; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

=> b wpix;d all l4

FILE 'WPIX' ENTERED AT 15:38:05 ON 13 SEP 2005
COPYRIGHT (C) 2005 THE THOMSON CORPORATION

FILE LAST UPDATED: 12 SEP 2005 <20050912/UP>
MOST RECENT DERWENT UPDATE: 200558 <200558/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE http://thomsonderwent.com/coverage/latestupdates/ <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER GUIDES, PLEASE VISIT:
http://thomsonderwent.com/support/userguides/ <<<

>>> NEW! FAST-ALERTING ACCESS TO NEWLY-PUBLISHED PATENT DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX FIRST VIEW - FILE WPIFV.
FOR FURTHER DETAILS: http://www.thomsonderwent.com/dwpifv <<<

>>> THE CPI AND EPI MANUAL CODES HAVE BEEN REVISED FROM UPDATE 200501.
PLEASE CHECK:
http://thomsonderwent.com/support/dwpiref/reftools/classification/code-revision/
FOR DETAILS. <<<
'BIX BI,ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE

L4 ANSWER 1 OF 1 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 2004-552556 [53] WPIX
DNN N2004-437171 DNC C2004-202196
TI Screening test substances for preventing or treating disease involving oxidative stress, by testing test substances for its ability to inhibit activity of GADD34L and identifying test substance that inhibits activity of GADD34L.
DC B04 D16 S03
IN JOUSSE, C; RON, D
PA (JOUS-I) JOUSSE C; (ROND-I) RON D
CYC 1
PI US 2004142345 A1 20040722 (200453)* 30 C12Q001-68 <--
ADT US 2004142345 A1 **Provisional US 2002-408679P 20020906, US 2003-650482 20030828**

PRAI US 2002-408679P 20020906; US 2003-650482 20030828
IC ICM C12Q001-68
ICS G01N033-53; G01N033-567
AB US2004142345 A UPAB: 20040818
NOVELTY - Screening (M1) several test substances for preventing or treating disease involving an oxidative stress, involves testing the test substances for its ability to inhibit the activity of GADD34L and identifying the test substance which inhibits the activity of GADD34L, thus to identify a test substance useful as a preventive or therapeutic agent for a disease involving an oxidative stress.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) identifying (M2) a test substance useful for preventing or treating a disease involving an oxidative stress, involves testing a test substance for its ability to inhibit the activity of GADD34L, thus to determine whether the substance promotes resistance to cell stress, and to identify the substance as a preventive or therapeutic agent for a disease involving an oxidative stress; and

(2) preventing or treating (M3) a disease involving an oxidative stress in a patient in need of such treatment, involves administering to the patient a GADD34L inhibitor identified for its ability to promote resistance to cell stress while not causing stress.

ACTIVITY - Cardiant; Vasotropic; Nephrotropic; Immunosuppressive; Neuroprotective. No supporting data is given.

MECHANISM OF ACTION - Inhibitor of GADD34L protein (claimed).

USE - (M1) is useful for screening several test substances for preventing or treating disease involving an oxidative stress. (M3) is useful for preventing or treating a disease involving an oxidative stress in a patient in need of such treatment. The disease includes neuronal ischemia, heart ischemia, renal damage induced by ischemia or toxins, autoimmune disease, or neurodegenerative disorder (claimed).

DESCRIPTION OF DRAWING(S) - The figure shows inhibition of endogenous GADD34L protects cells against oxidative toxicity.

Dwg.6/7
FS CPI EPI
FA AB; GI
MC CPI: B04-E01; B04-E03B; B04-E12; B04-G01; B04-N02; B10-B02J; B11-C07A; B11-C08E; B12-K04; B12-K04E; B14-F01; B14-F02; B14-F02D; B14-G02; B14-J01; B14-L06; B14-N10; D05-H09; D05-H11; D05-H12A; D05-H12D6; D05-H13
EPI: S03-E14A1; S03-E14H4

=> b home
FILE 'HOME' ENTERED AT 15:38:09 ON 13 SEP 2005

=>

```
=> b reg
FILE 'REGISTRY' ENTERED AT 07:57:29 ON 14 SEP 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   12 SEP 2005  HIGHEST RN 862971-50-4
DICTIONARY FILE UPDATES:  12 SEP 2005  HIGHEST RN 862971-50-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

**********************************************************************
*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                    *
**********************************************************************

Structure search iteration limits have been increased.  See HELP SLIMITS
for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> d sqide l32 tot

L32  ANSWER 1 OF 4  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   725915-08-2  REGISTRY
CN   11: PN: US20040142345 FIGURE: 3 unclaimed protein (9CI)  (CA INDEX NAME)
FS   PROTEIN SEQUENCE
SQL  713

PATENT ANNOTATIONS (PNTE):
Sequence |Patent
Source   |Reference
=========+============
Not Given|US2004142345
         |unclaimed
         |FIG 3


SEQ      1 MEPGTGGSRK RLGPRAGFRF WPPFFPRRSQ AGSSKFPTPL GPENSGNPTL
        51 LSSAQPETRV SYWTKLLSQL LAPLPGLLQK VLIWSQLFGG MFPTRWLDFA
       101 GVYSALRALK GREKPAAPTA QKSLSSLQLD SSDPSVTSPL DWLEEGIHWQ
       151 YSPPDLKLEL KAKGSALDPA AQAFLLEQQL WGVELLPSSL QSRLYSNREL
       201 GSSPSGPLNI QRIDNFSVVS YLLNPSYLDC FPRLEVSYQN SDGNSEVVGF
       251 QTLTPESSCL REDHCHPQPL SAELIPASWQ GCPPLSTEGL PEIHHLRMKR
       301 LEFLQQANKG QDLPTPDQDN GYHSLEEEHS LLRMDPKHCR DNPTQFVPAA
       351 GDIPGNTQES TEEKIELLTT EVPLALEEES PSEGCPSSEI PMEKEPGEGR
       401 ISVVDYSYLE GDLPISARPA CSNKLIDYIL GGASSDLETS SDPEGEDWDE
       451 EAEDDGFDSD SSLSDSDLEQ DPEGLHLWNS FCSVDPYNPQ NFTATIQTAA
       501 RIVPEEPSDS EKDLSGKSDL ENSSQSGSLP ETPEHSSGEE DDWESSADEA
       551 ESLKLWNSFC NSDDPYNPLN FKAPFQTSGE NEKGCRDSKT PSESIVAISE
       601 CHTLLSCKVQ LLGSQESECP DSVQRDVLSG GRHTHVKRKK VTFLEEVTEY
```

```
       651 YISGDEDRKG PWEEFARDGC RFQKRIQETE DAIGYCLTFE HRERMFNRLQ
       701 GTCFKGLNVL KQC

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  PRP (Properties)
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L32  ANSWER 2 OF 4  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   725915-07-1  REGISTRY
CN   9: PN: US20040142345 FIGURE: 2 unclaimed sequence (9CI)  (CA INDEX NAME)
FS   NUCLEIC ACID SEQUENCE
SQL  2942
NA   732 a   739 c   725 g   746 t

PATENT ANNOTATIONS (PNTE):
Sequence |Patent
Source   |Reference
=========+============
Not Given|US2004142345
         |unclaimed
         |FIGURE 2


SEQ      1 attttgggct tcgcttccac cgcaccagcc ggcctaccca gtccttccgg
        51 tatcgcgttg ctcaggggct tttcaaccct ctgtcagtcg gaaaaccatc
       101 gccgaggccg tgggggggact cctatccatg gtgttgaagc gtcgagccga
       151 ctagggaacc tccttccccg ccaggatgga agtcgcatca gtcgccgcct
       201 attgcgcggg ctgttcttcc ctgtgttctg ccgcccgctg ccgcattcgc
       251 tgccctctgt ggcttttctg ctggctcgaa gatcggcctg gagcagcgac
       301 gccaccgctg ggcaaggccg agactctgta ggcttcctcc gaatcccgtc
       351 gacctccagc cgctgagcgc cgcggcccta cctgagagac tgtcaagaaa
       401 aaggagatgg agccggggac aggcggatcg cggaaacggc ttggccctcg
       451 ggcgggcttc cggttctggc caccctttt ccctcggcga tcgcaagcag
       501 gctcttctaa gttcccgacg cctcttggcc cggaaaactc cgggaacccc
       551 acactgcttt cctctgccca gcccgagact cgggtcagtt actggacgaa
       601 actgctctcc cagctccttg cgccgctccc cggattgctt cagaaggtgc
       651 taatttggag ccaacttttc ggtggaatgt ttccgaccag atggctagat
       701 tttgctggag tctacagcgc cctgagagcc ctgaagggac gggagaaacc
       751 agccgccccc acagcgcaga aatctttgag ttcgctgcag ctcgactcct
       801 cagacccctc ggtcaccagt ccccttgatt ggctagagga ggggatccac
       851 tggcaatact cgcccccaga cctaaaattg gagcttaagg ccaagggaag
       901 tgctttggac cctgcagcac aggcttttct cttagagcag cagctgtggg
       951 gagtggagct gttgcccagt agccttcaat cccgtctgta ctctaaccgg
      1001 gaacttggct cttcgccctc tgggcctcta aacattcaac gcatagacaa
      1051 tttcagtgtg gtatcctatt tgctgaaccc ttcctacctg gactgctttc
      1101 ctaggctaga agtcagctat cagaacagtg atggaaatag cgaggtagtc
      1151 ggcttccaga cactaacccc agagagcagc tgcctgagag aggaccattg
      1201 tcatccccag ccgctgagtg cagaactcat tccggcctcg tggcagggat
      1251 gtccacctct ttctacggaa ggcctaccag aaattcacca tcttcgcatg
      1301 aaacggctgg aattccttca acaggctaac aaggggcaag atttacccac
      1351 ccctgaccag gataatggct accacagcct ggaggaggaa cacagccttc
      1401 tccggatgga tccaaaacac tgcagagata acccaacaca gtttgttcct
      1451 gctgctggag acattcctgg aaacacccag gaatccactg aagaaaaaat
      1501 agaattatta actacagagg ttccacttgc tttggaagaa gagagccctt
      1551 ctgagggctg tccatctagt gagataccta tggaaaagga gcctggagag
      1601 ggccgaataa gtgtagttga ttactcatac ctagaaggtg accttcccat
      1651 ttctgccaga ccagcttgta gtaacaaact gatagattat attttgggag
      1701 gtgcatccag tgacctggaa acaagttctg atccagaagg tgaggattgg
      1751 gatgaggaag ctgaggatga tggttttgat agtgatagct cactgtcaga
      1801 ctcagacctt gaacaagacc ctgaagggct tcacctttgg aactctttct
```

```
      1851 gcagtgtaga tccttataat ccccagaact ttacagcaac aattcagact
      1901 gctgccagaa ttgttcctga agagccttct gattcagaga aggatttgtc
      1951 tggcaagtct gatctagaga attcctccca gtctggaagc cttcctgaga
      2001 cccctgagca tagttctggg gaggaagatg actgggaatc tagtgcagat
      2051 gaagcagaga gtctcaaact gtggaactca ttctgtaatt ctgatgaccc
      2101 ctacaaccct ttaaatttta aggctccttt tcaaacatca ggggaaaatg
      2151 agaaaggctg tcgtgactca aagaccccat ctgagtccat tgtggccatt
      2201 tctgagtgtc acaccttact ttcttgtaag gtgcagctgt tggggagcca
      2251 agaaagtgaa tgtccagact cggtacagcg tgacgttctt tctggaggaa
      2301 gacacacaca tgtcaaaaga aaaaaggtaa ccttccttga agaagttact
      2351 gagtattata taagtggtga tgaggatcgc aaaggaccat gggaagaatt
      2401 tgcaagggat ggatgcaggt tccagaaacg aattcaagaa acagaagatg
      2451 ctattggata ttgcttgaca tttgaacaca gagaaagaat gtttaataga
      2501 ctccagggaa catgcttcaa aggacttaat gttctcaagc aatgttgagt
      2551 tggcagcctg tagtcctagc tagcatacac tacctcttac ctgagaggtg
      2601 tcttttaaaa acaaatcttg gcagctgtcc tttgacattt tttttttag
      2651 aggaaatgta acttggatct agtttaattt tttttttgc aacatatccc
      2701 actcagaaac attcaggttt gaagccagcc ctgataatga aggatgaact
      2751 agtgtgattt ctaatcctcc ctttttgat ttagttggat gtgcttttaa
      2801 atgtcctttg cctgcatgag gtggaaaggg gacctttttg agttgtcatt
      2851 ttgcactttc aaaacttatt ttcttggaaa acaatattta tagggcttaa
      2901 agcccatttt catttctaat ctaaattatg tgtgcctatc tg
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  PRP (Properties)
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L32  ANSWER 3 OF 4  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   725915-02-6  REGISTRY
CN   2: PN: US20040142345 FIGURE: 5 unclaimed protein (9CI)  (CA INDEX NAME)
FS   PROTEIN SEQUENCE
SQL  698

PATENT ANNOTATIONS (PNTE):
Sequence |Patent
Source   |Reference
=========+============
Not Given|US2004142345
         |unclaimed
         |FIG 5


SEQ      1 METGTHRARK RPGPRLGSWF RLPFLRRSHA CSSEFPPPSS RQNPGNSALP
        51 ERRTRYWTKL LSQLLALLPS LFQKLLLWSQ LSGGLIPTRW LDFAASYSAL
       101 RASRGREESD APTVQKSLSY TAAGLFAKTR VVSTLALARG GTPVAVLVLR
       151 LEVKLKAQER ALDSAAPTFL LEQQLWGVEL LPSSLQAGLV SHRELDSSSS
       201 GPLSVQSLGN FKVVSYLLNP SYLDYLPQLG LRCQSSAGGG QFVGFRTLTP
       251 ESCYLSEDGC HPQPLRAEMS ATAWRRCPPL STEGLPEIHH RRMRWLVFLQ
       301 PNQGQDLPTL DQDNGYHSLE EEHNLLRMDP QHCTDNPAQA VSPAADRPEP
       351 TEKKPELVIQ EVSQSPQGSS LFCELPVEKE CEEDHTNATD LSDRGESLPV
       401 STRPVCSNKL IDYILGGAPS DLEASSDSES EDWGEEPEDD GFDSDGSLSE
       451 SDVEQDSEGL HLWNSFHSVD PYKPQNFTAT IQTAARIAPR DPSDSGTSWS
       501 GSCGVGSCQE GPLPETPDHS SGEEDDWEPS ADEAENLKLW NSFCHSEDPY
       551 NLLNFKAPFQ PSGKNWKGRQ DSKASSEVTV AFSGHHTLLS CKAQLLESQE
       601 DNCPGCGLGE ALAGERYTHI KRKKVTFLEE VTEYYISGDE DRKGPWEEFA
       651 RDGCRFQKRI QETEVAIGYC LAFEHREKMF NRLRIESKDL LLYSNVKK
MF   Unspecified
CI   MAN
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  PRP (Properties)
```

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L32 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2005 ACS on STN
RN **725915-01-5** REGISTRY
CN 1: PN: US20040142345 FIGURE: 4 unclaimed DNA (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE
SQL **5468**
NA 1321 a 1272 c 1366 g 1509 t

PATENT ANNOTATIONS (PNTE):

Sequence Source	Patent Reference
Not Given	US2004142345
	unclaimed
	FIG 4

SEQ
```
      1 cggtcctccg tctcgccctg cagcttccgg gtgtgcggct gcggccattt
     51 tgagcttcgc ttctttgcgc cctcgcctgc cacccagcca ccctttccgc
    101 cttggcgttt cgcgcctccg tgcgggccac cggaaacgcc gccgtcgtct
    151 ccgtcgccgc cgcgcgaggg agggtcttct ctatggtgga gcgatctcac
    201 acggcctagg acgtctcctt ccctagccgg gatggaccta accgcggtcg
    251 ccaccgcttg cgcgggcctc tgggccgtcc ggtgcagcac tcgttgcgga
    301 agccgccgct ctctgggcct cctctgccgg cgcgggaatc ggactgcagt
    351 acccactccg tggctgggca aggcggagac tgtgtagacc tcggatccag
    401 cctgcgctga cgccgctgag ctctgtcctc ctcctgtctg agaagccgcc
    451 aaggaaagga gatggagaca ggaacgcaca gggcccggaa gcggcctggc
    501 cctcggctgg gctcctggtt ccggctgccc ttccttcggc gatcgcacgc
    551 ctgctcttcg gagttcccgc cgccttcctc tcgacaaaat cccgggaact
    601 ccgctctgcc cgagcgtcgg accaggtact ggaccaaatt gctttctcag
    651 ctccttgccc tgctccctag cctattccag aagctgctgc tttggagcca
    701 gctttccggg ggcctgattc ctaccagatg gctagatttt gccgcaagtt
    751 acagcgccct gagagcttcg agaggacggg aggaatctga cgctcccacg
    801 gtgcagaagt ctctgagtta cactgcggct ggactcttcg cgaagactcg
    851 cgtcgtcagt actcttgcat tggctagagg agggactcca gtggcagtgc
    901 tcgtcctcag actggaagtt aaactcaagg cccaggaaag agctttagac
    951 tctgcagcgc ccactttcct cctggagcag cagctgtggg gagtggagtt
   1001 gctgcccagt agccttcaag ctggtctagt ctcccaccga gaacttgact
   1051 cttcatcctc tgggcctctg agcgttcaga gcttaggtaa tttcaaggta
   1101 gtttcctatc tcctgaaccc ttcctacctg gactaccttc cccagttagg
   1151 gctgcgctgt cagagcagcg ctggaggtgg ccagtttgtg ggtttccgaa
   1201 cactaacccc agagagctgc tatctttctg aagatggttg tcaccctcag
   1251 ccgttgcggg cagagatgtc ggcaaccgcc tggagaaggt gtccgcctct
   1301 ctctacagaa ggcctgccgg aaatccacca ccttcgtatg aaacggctag
   1351 aattcctcca ggctaacaaa gggcaagagt tacccacccc tgaccaagat
   1401 aatggctatc atagcctgga ggaggaacat aaccttctcc ggatggaccc
   1451 acaacattgc acagataacc cagcacaggc ggtgtcccct gctgcagaca
   1501 ggccggagcc cactgagaaa aaaccagaat tggtgattca agaagtttca
   1551 cagagccccc agggaagcag tctgttttgt gaattacccg tggaaaaaga
   1601 atgtgaagag gaccacacta atgcaactga cctctcagat agaggagaga
   1651 gccttcctgt ttctaccaga ccagtttgta gcaacaaact gatagattat
   1701 attttgggag gcgcccccag tgacttggaa gccagctctg attctgaaag
   1751 tgaggattgg ggcgaggaac ctgaggacga tggctttgat agcgatggct
   1801 ccctgtctga atcagacgtg gaacaggact cggaaggcct tcacctttgg
   1851 aactctttcc acagtgtaga tccttacaaa ccccaaaact ttacagccac
   1901 gattcagacg gctgccagaa ttgcccccag agacccatca gattcaggga
   1951 catcctggtc tggcagctgt ggtgtaggga gctgtcagga gggacccctt
   2001 ccggagaccc ccgaccatag ttccggggag gaagatgact gggaaccgag
   2051 tgcagatgaa gcagagaatc ttaaattgtg gaactctttc tgtcattctg
   2101 aggaccccta caacctttta aattttaagg ctcctttca accgtcaggg
   2151 aagaattgga aaggccgtca ggactcaaag gcctcttctg aggtcacagt
   2201 ggccttctct ggccatcata ccttactttc ttgtaaggcc cagctgttag
   2251 agagccaaga agataattgt ccaggctgtg ggctgggtga ggctcttgct
   2301 ggagaaagat acacccatat caagagaaaa aaggtaacct tcctggaaga
```

```
2351 agttactgag tattatataa gtggtgatga ggatcgcaaa ggaccatggg
2401 aagaatttgc aagggatgga tgcaggttcc agaaacgaat tcaagaaaca
2451 gaagttgcca ttggctactg cttggccttt gagcacagag aaaaaatgtt
2501 taatagactg aggatcgagt caaaggactt actgttgtac agcaatgtta
2551 agaagtgaac agcctgcaac ccgtgcccac tctgtctctt acttgagagt
2601 ttcccttaaa aacaaacact ggcagctgtc cttggacatg tttttaaaga
2651 aacaacttgt atctagagat gcagtttgat tatttttggg taatgtgtct
2701 cattagaaac accaactccg ataatgaaga atctcttatc tgtaatcctc
2751 tcttttccta tttagttgga tgtgggtttt gtctttttga gagggtctca
2801 ctgcataatt ctgtttggcc taggtctatg tatgtagacc aggttggcct
2851 tgaagttggt atttccttgc ctctgtttcc tgtgccacca tgcccagctg
2901 gaagtgtttt taaatatcct ctgcttacct ggggtgagag tttaattttg
2951 cactttcaaa acgtttcttc tggaggcagg ggctggtctg gtttacatac
3001 aggcttcagg ccagctaggg ctatgtggtg agacctagtc ttagaggaca
3051 aacagaacaa aacagtcagg ttactgtgga aactgaggca ggaggatagg
3101 aaggtccagg tatgcctgga actcagtgaa ctctgaactc aaggccagca
3151 tggggagttt agcaagacct ttttacactc agaatggaaa aggaagctgg
3201 ggatatagct cggtagcaga ggcccctgcc tacatgtgca aggtcctggg
3251 ttcagtcccc agtactgcaa atagaaagaa aaaacattgt cttggataac
3301 tataaggttt aagcctcata gtcagttcta actcaaatta tgcatgcatt
3351 gagttcttgt gtgctttttc tgttctaaaa ttaatgggct ttatgggttt
3401 tgtttttgta tgtttttatg tctgttatat tttgaggtag gggattgagg
3451 cagggtctca ctgtggcctt gagctcatgg cagttttcct gcttcaactg
3501 agtgttttgg tttgtttgtg tttgtgtttt tttactttca tagatttgac
3551 ttaatgaagg caaaaacctg ttatcaacct aaaagacatt gatgtgtcac
3601 ttcagtggtg gattttctcc ctctttttt ttttccccca gagctgagga
3651 ccaaacccag ggctttgcac ttgctaggca agcgctctac cactgagcta
3701 aatccccaaa ccacccccc ccctttttctt tttttaaaga catggtctta
3751 tatagtctag gctggcctta aactcattac ttagccaagg atggctttga
3801 aagatcctcc tgtcctcttg tttggcttgc acatggcatg tgccatacat
3851 ccagattttt ctctgtatct aggtcttttt aagatatttc caaggactgc
3901 ccacaaatcc acagtgcagt actttcttga ctgggaaagc ggggttggtg
3951 tgcttttcaa aggcacacac cattatgccc agctggtctg ccaaacttaa
4001 catatttggt ttctgtgcaa actgtccatt tggaaggttt ctgtgtgttg
4051 tagtttcagt tgaatgtggc tctctgtagc tttcaagaat gggtagaaat
4101 cataaagcac tcttaagtaa tcattgcatt gtagacattt tttttttta
4151 actagggggt atttgggaga catgtcagat attcactttt gttttatgtg
4201 tcttaaaacc agtgttactt acaccctgcc tcagcactgg cacttttcaa
4251 acctgtcttg gagacactgt aaacttggat ggtgcagttc tgggttttca
4301 tgtgtaaaat gtcaactaca aaggtcaata tccaggtttg ttgtgttcta
4351 ccttatgtag agagaagcaa agcagaaagg gcagatagag cagccagaaa
4401 gtgctagtgt ccccccaaa gcgtgcttct agatagtgtg tggatcaggt
4451 gtgcttggtt tgttcagtta gcgtcacctg ttgtgcatgg ttgaggtaat
4501 gtgttaccag ttctttagtg gttacatgca caaaagagag gacctctgag
4551 tcgggtgtgg gatgagcttt ccagacctgg cagggtaaac tacctcagtt
4601 tataatctcc ctggttattt ccgtttgatg tgatctaagg tctgcctcag
4651 tggtgatgat gttcatccac acacaaggtt agtaagagtg cacgaccaga
4701 aacgttggtc ttatttttga gaacccccat ttctgtgtat tttatgcacc
4751 tgcctttagt gaactccaga gtgcattaaa gagtctggtt tagtgccgtg
4801 ggaatgggct agtttagaag ctatgtttgg aaagcaggca agttgacttt
4851 aggaagaaaa gctgtgacag tgtgtagaca tttcttttaa accggactgc
4901 agcttaacaa cacttgattt cagatgatta ggtttttgtt tctgagaccc
4951 agcacctgta tatttaaaaa ttgttccaga ttacaccttc actatcaaat
5001 gagtaaatga ctcatgcctg cagacatgtc ctgatggtgg caagaacaga
5051 aggatctttg actgaaggag aaaaactgtc attgtcatcc cagcccccag
5101 gaaagaacac ctccaaggca ggcaggcagg caggcaggca tggtggttct
5151 agttgaatac acattcaagt cttgcagtgg tgctttagat ctgtgtagca
5201 tgtgaggctc tgtacaggtg ggggccacac ttctgagggc tgaaatgtgg
5251 caacccttta tctaacttga aatcaaaacc gtcaaatttt atttttata
5301 atttaagaaa gagttgggga atgacatttt ttgagttggc cttttcagct
5351 cagtcatttt acgtgtaacg tggagatttg atagctcaga ttatatttgt
5401 atataattat taactaatct gtaaattgta ataaatatat ttgcaattat
5451 taaaaaaaaa aaaaaaaa
```

MF Unspecified
CI MAN
SR CA

```
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  PRP (Properties)
               1 REFERENCES IN FILE CA (1907 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=> d his full

     (FILE 'HOME' ENTERED AT 07:28:25 ON 14 SEP 2005)

     FILE 'HCAPLUS' ENTERED AT 07:28:58 ON 14 SEP 2005
L1             1 SEA ABB=ON  PLU=ON  US2004142345/PN OR (US2002-408679# OR
                 US2003-650482#)/AP,PRN

     FILE 'REGISTRY' ENTERED AT 07:29:09 ON 14 SEP 2005

     FILE 'HCAPLUS' ENTERED AT 07:29:09 ON 14 SEP 2005
L2             TRA L1 1- RN :       55 TERMS

     FILE 'REGISTRY' ENTERED AT 07:29:10 ON 14 SEP 2005
L3            55 SEA ABB=ON  PLU=ON  L2
L4             1 SEA ABB=ON  PLU=ON  L3 AND 9013-05-2
L5            23 SEA ABB=ON  PLU=ON  (EIF2A OR EIF2(W)ALPHA)/CNS
L6             0 SEA ABB=ON  PLU=ON  L5 AND 82249-72-7
L7             1 SEA ABB=ON  PLU=ON  82249-72-7
L8            77 SEA ABB=ON  PLU=ON  (EIF(W)(2A OR 2 (W)ALPHA))/CNS
L9            43 SEA ABB=ON  PLU=ON  ((EUKARYOTIC INITIATION FACTOR OR INITIATIO
                 N (W)FACTOR)(W)(2A OR 2 (W)ALPHA))/CNS
L10           77 SEA ABB=ON  PLU=ON  (L7 OR L8)
L11          137 SEA ABB=ON  PLU=ON  (L5 OR L9 OR L10)
L12            1 SEA ABB=ON  PLU=ON  L11 AND (PHOSPHATASE? OR GADD34L OR GADD
                 (1A)(34L OR 34 (1A)L) OR GADD34 (1A)L)

     FILE 'HCAPLUS' ENTERED AT 07:41:04 ON 14 SEP 2005
L13         1374 SEA ABB=ON  PLU=ON  L11
L14         2218 SEA ABB=ON  PLU=ON  EIF2A OR EIF2(W)ALPHA OR (EIF OR
                 EUKARYOTIC INITIATION FACTOR OR INITIATION (W)FACTOR)(W)(2.ALPH
                 A. OR 2 (W)ALPHA OR 2)
L15         2934 SEA ABB=ON  PLU=ON  (L13 OR L14)
                 E RON D/AU
L16          117 SEA ABB=ON  PLU=ON  ("RON D"/AU OR "RON DAVID"/AU)
                 E JOUSSE C/AU
L17           22 SEA ABB=ON  PLU=ON  ("JOUSSE C"/AU OR "JOUSSE CELINE"/AU)
L18        24509 SEA ABB=ON  PLU=ON  (NYU OR NEW (W)YORK (W)UNIV?)/CS,PA
                 D BIB
L19           57 SEA ABB=ON  PLU=ON  L15 AND (L16 OR L17 OR L18)
                 D QUE L12
L20            1 SEA ABB=ON  PLU=ON  L15 (L) (GADD34L OR GADD (1A)(34L OR 34
                 (1A)L) OR GADD34 (1A)L)
                 D SCA
L21            1 SEA ABB=ON  PLU=ON  L20 AND L19
L22        39104 SEA ABB=ON  PLU=ON  (DRUG SCREENING+OLD OR HIGH THROUGHPUT
                 SCREENING)/CT
L23         2877 SEA ABB=ON  PLU=ON  L15 NOT L19
L24           86 SEA ABB=ON  PLU=ON  L23 AND L22
L25          137 SEA ABB=ON  PLU=ON  L15 (L) ?PHOSPHATAS?
L26            2 SEA ABB=ON  PLU=ON  L24 AND L25

     FILE 'REGISTRY' ENTERED AT 07:55:05 ON 14 SEP 2005
L27              QUE ABB=ON  PLU=ON  SQL=2942
L28              QUE ABB=ON  PLU=ON  SQL=713
L29              QUE ABB=ON  PLU=ON  SQL=5468
L30              QUE ABB=ON  PLU=ON  SQL=698
L31            5 SEA ABB=ON  PLU=ON  L3 AND (L27 OR L28 OR L29 OR L30)
L32            4 SEA ABB=ON  PLU=ON  L31 NOT NT2RP3002770
```

```
     FILE 'HCAPLUS' ENTERED AT 07:58:42 ON 14 SEP 2005
L33            1 SEA ABB=ON  PLU=ON  L32
L34            1 SEA ABB=ON  PLU=ON  GADD34L OR GADD(1A)(34L OR 34 (1A)L) OR
                 GADD34 (1A)L
L35            1 SEA ABB=ON  PLU=ON  (L33 OR L34)
L36            1 SEA ABB=ON  PLU=ON  (L35 OR L21)

     FILE 'USPATFULL, USPAT2' ENTERED AT 08:00:38 ON 14 SEP 2005
L37            1 SEA ABB=ON  PLU=ON  L31

     FILE 'HCAOLD' ENTERED AT 08:01:03 ON 14 SEP 2005
L38            0 SEA ABB=ON  PLU=ON  L31
L39            0 SEA ABB=ON  PLU=ON  GADD34L OR GADD(1A)(34L OR 34 (1A)L) OR
                 GADD34 (1A)L

=> b hcap
FILE 'HCAPLUS' ENTERED AT 08:01:29 ON 14 SEP 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
the American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 14 Sep 2005  VOL 143 ISS 12
FILE LAST UPDATED: 13 Sep 2005  (20050913/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d all l36 tot

L36  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2005 ACS on STN
AN   2004:589132  HCAPLUS
DN   141:134040
ED   Entered STN:  23 Jul 2004
TI   Methods of screening test compounds using GADD34L, an
     eIF2alpha-specific phosphatase subunit
IN   Ron, David; Jousse, Celine
PA   USA
SO   U.S. Pat. Appl. Publ., 30 pp.
     CODEN: USXXCO
DT   Patent
LA   English
IC   ICM  C12Q001-68
     ICS  G01N033-53; G01N033-567
INCL 435006000; 435007200
CC   1-1 (Pharmacology)
     Section cross-reference(s): 15
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    --------------------   --------
PI   US 2004142345        A1    20040722    US 2003-650482         20030828
PRAI US 2002-408679P      P     20020906
CLASS
```

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004142345	ICM	C12Q001-68
	ICS	G01N033-53; G01N033-567
	INCL	435006000; 435007200
US 2004142345	NCL	435/006.000

AB The invention is directed to methods and reagents for identifying test substances useful for the prevention or treatment of diseases involving an oxidative stress. The methods involve screening assays, including high throughput screening techniques, in which the test substances are tested for their ability to promote resistance to oxidative stress by inhibiting the activity of **GADD34L**, and thereby inhibiting the dephosphorylation of **eIF2α** , while not causing stress.

ST **GADD34L** eIF2alpha kinase drug screening oxidative stress; high throughput screening eIF2alpha dephosphorylation inhibitor **GADD34L** phosphatase

IT Gene, animal
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(CAT; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(CHOP; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Proteins
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)
(GADD34, -Like (**GADD34L**); methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT mRNA
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**GADD34L**; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Integrated Stress Response target; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Ischemia
(cardiac; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Nervous system, disease
(degeneration; methods of screening test compds. using **GADD34L** , an eIF2alpha-specific phosphatase subunit)

IT Oxidative stress, biological
(diseases involving; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT High throughput screening
(drug; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Drug screening
(high throughput; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Nucleic acid hybridization
(in situ; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Kidney, disease
(injury; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Heart, disease
Kidney, disease
Nerve, disease
(ischemia; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Gene, animal

RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(luc; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Autoimmune disease
DNA sequences
Dephosphorylation, biological
Drug screening
Human
Immunoassay
Northern blot hybridization
Protein sequences
(methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Ischemia
(neuronal; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Phosphorylation, biological
(protein; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Toxins
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(renal damage induced by; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Injury
Ischemia
(renal; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(stress-induced, 1, c; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT Antibodies and Immunoglobulins
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(to phosphorylated **eIF2**α ; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT 9013-05-2D, Phosphatase, eIF2alpha-specific subunit (**GADD34L**)
82249-72-7, **EIF2**α kinase
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)
(methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT 139814-82-7, GenBank L00039 140289-54-9, GenBank M12481 150948-02-0, GenBank L15447 162197-23-1, GenBank D31863 178350-54-4, GenBank W90900 183046-65-3, GenBank AA111463 183265-10-3, GenBank D87990 187578-48-9, GenBank AA259342 189203-30-3, GenBank U83148 189869-11-2, GenBank D86527 197614-27-0, GenBank AA612483 200785-26-8, GenBank AA684508 201592-41-8, GenBank U63387 205560-99-2, GenBank AA866971 206018-51-1, GenBank AA881202 212429-53-3, GenBank AB014494 219900-69-3, GenBank AF063095 239345-32-5, GenBank AI839392 239717-83-0, GenBank AI845538 239720-42-4, GenBank AI845798 239745-83-6, GenBank AI848343 239773-54-7, GenBank AI851163 245142-65-8, GenBank AW120711 245145-64-6, GenBank AW120976 245154-27-2, GenBank AW121840 245166-12-5, GenBank AW123026 245181-02-6, GenBank AW124530 245192-02-3, GenBank AW125634 384476-04-4, GenBank M94087 389183-14-6, GenBank J04103 389375-15-9, GenBank AA049696 389392-18-1, GenBank AA096870 389434-31-5, GenBank AA213167 390638-13-8, GenBank AK027650 391557-92-9, GenBank U19118 391772-30-8, GenBank U40930 391791-12-1, GenBank U28423 391793-41-2, GenBank W84014 391807-41-3, GenBank AA0050417 391831-23-5, GenBank AA208877
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

IT 56-86-0, L-Glutamic acid, biological studies 11089-65-9, Tunicamycin

15502-74-6, Arsenite
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)
IT **725915-01-5** 725915-03-7 725915-04-8 725915-05-9
725915-06-0 726439-38-9 726439-39-0
RL: PRP (Properties)
(unclaimed nucleotide sequence; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)
IT **725915-02-6 725915-08-2**
RL: PRP (Properties)
(unclaimed protein sequence; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)
IT **725915-07-1**
RL: PRP (Properties)
(unclaimed sequence; methods of screening test compds. using **GADD34L**, an eIF2alpha-specific phosphatase subunit)

=> d all hitseq hitstr l26 tot

L26 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:626521 HCAPLUS
DN 139:144971
ED Entered STN: 15 Aug 2003
TI Protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses
IN Mao, Yumin; Xie, Yi
PA Biowindow Gene Development Inc., Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 34 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
IC ICM C07K014-47
ICS C07K016-18; C12N015-10; C12N015-11; C12N015-12; C12N015-63; C12N015-64; C07H021-00; C12P021-02
CC 3-3 (Biochemical Genetics)
Section cross-reference(s): 1, 6, 13
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1364785	A	20020821	CN 2001-105157	20010110
PRAI CN 2001-105157		20010110		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
CN 1364785	ICM	C07K014-47
	ICS	C07K016-18; C12N015-10; C12N015-11; C12N015-12; C12N015-63; C12N015-64; C07H021-00; C12P021-02

AB The invention provides protein and cDNA sequences of a novel 14.63-kilodalton human protein, designated as "phosphatase 2A catalytic subunit α 14.63", which has similar expression pattern to that of known phosphatase 2A catalytic subunit α. The invention relates to expression of phosphatase 2A catalytic subunit α-like protein in E. coli BL21(DE3)plySs transfected with plasmid pET-28(+). The invention also relates to preparation of antibody against phosphatase 2A catalytic subunit α-like protein. The invention further relates to the uses of the phosphatase 2A catalytic subunit α-like protein in treatment of phosphatase 2A catalytic subunit α-related diseases.
ST phosphatase 2A catalytic subunit alpha protein cDNA sequence human
IT Immunity
(disorder, treatment of; protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)
IT Brain

(fetal, phosphatase 2A catalytic subunit α-like protein cloned from; protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT Nucleic acid hybridization
(for detecting phosphatase 2A catalytic subunit α-like protein mRNA; protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT Nucleic acid amplification (method)
(for detecting phosphatase 2A catalytic subunit α-like protein nucleic acid; protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT Plasmid vectors
Viral vectors
(for expressing phosphatase 2A catalytic subunit α-like protein; protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT Diagnosis
(mol.; protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT Anti-AIDS agents
Anti-inflammatory agents
Antitumor agents
(phosphatase 2A catalytic subunit α-like protein as; protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT mRNA
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(phosphatase 2A catalytic subunit α-like protein, tissue expression profile; protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT DNA microarray technology
Drug screening
Human
Molecular cloning
Protein sequences
cDNA sequences
(protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT Primers (nucleic acid)
Probes (nucleic acid)
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT Antisense nucleic acids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT Antibodies and Immunoglobulins
RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)
(to phosphatase 2A catalytic subunit α-like protein; protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT AIDS (disease)
Blood, disease
Inflammation
Neoplasm
(treatment of; protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT 569387-74-2P
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);

DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT **70356-43-3P**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(catalytic subunit α-like protein; protein and cDNA sequences of 14.63-kilodalton human **phosphatase** 2A catalytic subunit α-like protein and their therapeutic uses)

IT 569387-73-1 569387-75-3
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleotide sequence; protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT 569478-48-4 569478-49-5 569478-50-8 569478-51-9 569478-52-0 569478-53-1
RL: PRP (Properties)
(unclaimed nucleotide sequence; protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT 569353-18-0
RL: PRP (Properties)
(unclaimed sequence; protein and cDNA sequences of 14.63-kilodalton human phosphatase 2A catalytic subunit α-like protein and their therapeutic uses)

IT **70356-43-3P**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(catalytic subunit α-like protein; protein and cDNA sequences of 14.63-kilodalton human **phosphatase** 2A catalytic subunit α-like protein and their therapeutic uses)

RN 70356-43-3 HCAPLUS
CN Phosphatase, protein formation initiation factor IF-2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **70356-43-3P**
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(catalytic subunit α-like protein; protein and cDNA sequences of 14.63-kilodalton human **phosphatase** 2A catalytic subunit α-like protein and their therapeutic uses)

RN 70356-43-3 HCAPLUS
CN Phosphatase, protein formation initiation factor IF-2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L26 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:290699 HCAPLUS
DN 132:318002
ED Entered STN: 05 May 2000
TI Assay for detecting modulators of serine/threonine phosphatase activity
IN Ciaramella, Giuseppe
PA Pfizer Limited, UK; Pfizer Inc.
SO Eur. Pat. Appl., 49 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM C12Q001-70

ICS G01N033-573
CC 1-1 (Pharmacology)
Section cross-reference(s): 15
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 997537	A2	20000503	EP 1999-307236	19990913
	EP 997537	A3	20040128		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	GB 2342716	A1	20000419	GB 1999-17631	19990727
	GB 2342716	B2	20040512		
	CA 2280276	AA	20000314	CA 1999-2280276	19990830
	JP 2000135100	A2	20000516	JP 1999-259843	19990914
PRAI	GB 1998-20025	A	19980914		
	GB 1999-17631	A	19990727		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 997537	ICM	C12Q001-70
	ICS	G01N033-573
EP 997537	ECLA	C12Q001/42; C12Q001/48B
GB 2342716	ECLA	C12Q001/18; C12Q001/48B

AB An assay method for identifying an agent that can affect the activity or expression of a nucleotide sequence or the expression product (IP) thereof is described. The assay method comprises contacting an agent with a nucleotide sequence coding for a serine/threonine phosphatase; and/or the EP thereof (i.e., a serine/threonine phosphatase); and determining whether the agent affects the activity or expression of the nucleotide sequence and/or the EP. The procedure is of use in screening antiviral agents.

ST drug screening serine threonine phosphatase modulator sequence

IT Initiation factors (protein formation)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Tif (translation initiation factor), **eIF2α** ;
assay for detecting modulators of serine/threonine **phosphatase** activity for virucide screening)

IT Antiviral agents
Drug screening
Protein sequences
Signal transduction, biological
cDNA sequences
(assay for detecting modulators of serine/threonine phosphatase activity for virucide screening)

IT Interferons
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(assay for detecting modulators of serine/threonine phosphatase activity for virucide screening)

IT Immunoassay
(enzyme-linked immunosorbent assay; assay for detecting modulators of serine/threonine phosphatase activity for virucide screening)

IT Gene
(expression; assay for detecting modulators of serine/threonine phosphatase activity for virucide screening)

IT 9025-75-6, Serine/threonine phosphatase
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(PP1, modulators; assay for detecting modulators of serine/threonine phosphatase activity for virucide screening)

IT 148789-74-6 191429-83-1, Protein (human clone pHu34B gene GADD34)
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU

(Occurrence); PROC (Process)
(amino acid sequence; assay for detecting modulators of serine/threonine phosphatase activity for virucide screening)
IT **91608-96-7**, Protein kinase DAI
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(assay for detecting modulators of serine/threonine **phosphatase** activity for virucide screening)
IT 148428-13-1 266331-92-4
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(nucleotide sequence; assay for detecting modulators of serine/threonine phosphatase activity for virucide screening)
IT **91608-96-7**, Protein kinase DAI
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(assay for detecting modulators of serine/threonine **phosphatase** activity for virucide screening)
RN 91608-96-7 HCAPLUS
CN Kinase (phosphorylating), protein, DAI (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **91608-96-7**, Protein kinase DAI
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(assay for detecting modulators of serine/threonine **phosphatase** activity for virucide screening)
RN 91608-96-7 HCAPLUS
CN Kinase (phosphorylating), protein, DAI (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

=> b uspatall
FILE 'USPATFULL' ENTERED AT 08:02:16 ON 14 SEP 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS).

FILE 'USPAT2' ENTERED AT 08:02:16 ON 14 SEP 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs hitrn l37 tot

L37 ANSWER 1 OF 1 USPATFULL on STN
AN 2004:184462 USPATFULL
TI Methods of screening test compounds using GADD34L, an eIF2alpha-specific phosphatase subunit
IN Ron, David, New York, NY, UNITED STATES
Jousse, Celine, Saint Genes Champanelle, FRANCE
PI US 2004142345 A1 20040722
AI US 2003-650482 A1 20030828 (10)
PRAI US 2002-408679P 20020906 (60)
DT Utility
FS APPLICATION
LREP DARBY & DARBY P.C., P. O. BOX 5257, NEW YORK, NY, 10150-5257
CLMN Number of Claims: 32
ECL Exemplary Claim: 1
DRWN 11 Drawing Page(s)
LN.CNT 1851
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention is directed to methods and reagents for identifying test substances useful for the prevention or treatment of diseases involving an oxidative stress. The methods involve screening assays, including high throughput screening techniques, in which the test substances are

tested for their ability to promote resistance to oxidative stress by inhibiting the activity of GADD34L, and thereby inhibiting the dephosphorylation of eIF2α, while not causing stress.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **390638-13-8**, GenBank AK027650
(methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)
IT **725915-01-5**
(unclaimed nucleotide sequence; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)
IT **725915-02-6 725915-08-2**
(unclaimed protein sequence; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)
IT **725915-07-1**
(unclaimed sequence; methods of screening test compds. using GADD34L, an eIF2alpha-specific phosphatase subunit)

=> b home
FILE 'HOME' ENTERED AT 08:02:41 ON 14 SEP 2005

=>